

Application No. 09/362,022

REMARKS

In response to the Office Action of July 12, 2005, Applicants have carefully considered the rejections of the Examiner in the above-identified application. In light of this consideration, Applicants believe that the claims as now amended are allowable. Claims 13-17 have been canceled. Applicants respectfully request reconsideration and allowance of the application.

In the first Office Action of March 31, 2003, claims 1-3, 9, 13, and 14 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting over co-pending patent 09/362,022. Claims 1-3, 9, 13, and 14 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,555,557 to Mailloux (hereinafter Mailloux). Claims 4-8, 10-12, and 15-17 were rejected under 35 U.S.C. §103(a) as being obvious over Mailloux and further in view of the Applicants' cited well-known art.

In the second Office Action of September 29, 2003, claims 1-17 were rejected under 35 U.S.C. §112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 9 and 13 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,818,504 to Chung et al. (hereinafter Chung). Claims 1-3 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 4,847,641 to Tung and in further view of Chung. Claims 4-8 were rejected under 35 U.S.C. §103(a) as being obvious over Tung and in further view of Chung and further in view of the Applicants' cited well-known prior art. Claims 10-12 and 15-17 were rejected under 35 U.S.C. §103(a) as being obvious over Chung and further in view of the Applicants' cited well-known prior art. Claim 14 was rejected under 35 U.S.C. §103(a) as being obvious over Chung and further in view of U.S. Patent No. 6,181,438, to Bracco (hereinafter Bracco).

Application No. 09/362,022

In the third Office Action of June 16, 2004, claims 1-17 were rejected under 35 U.S.C. §112 second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1-3, 9, and 13-14 were rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,740,330 to Abe (hereinafter after Abe) and in further view of U.S. Patent No. 5,299,308 to Suzuki et al. (hereinafter Suzuki). Claims 4-8 10-12, and 15-17 were rejected under 35 U.S.C. §103(a) as being obvious over Abe and in further view of Suzuki and further in view of prior art.

In the fourth Office Action of March 8, 2005, claims 13-14 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,266,154 to Allen (hereinafter after Allen). Claims 15-17 were rejected under 35 U.S.C. §103(a) as being obvious over Allen and in further view of well known prior art. Claims 1-12 were indicated as allowable subject matter. The Applicants expressed their appreciation for this indication by the Examiner. Claims 13-17 were canceled in response to this action, and given that claims 1-12 were indicated as allowable subject matter, the expectation was that the application should thereby be in condition for allowance. Allowance of the application was respectfully requested.

In this the fifth Office Action of July 12, 2005, claims 1-3, and 9 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 5532828 to Mitsuse (hereinafter after Mitsuse). Claims 4-8 and 10-12 are rejected under 35 U.S.C. §103(a) as being obvious over Mitsuse and in further view of well known prior art.

Application No. 09/362,022

Mitsuse teaches an image forming apparatus that includes a dot forming unit responsive to a drive signal for forming a dot on a pixel when the drive signal is indicative of forming the dot to reproduce a halftone image. The apparatus further includes a drive signal generation circuit for generating the drive signal according to a video density signal, a deletion signal, an addition signal, and a directional signal. The deletion signal indicates that the video density signal of the pixel shows a shadow level and there is a first edge adjacent to the pixel in a first image around the pixel. The addition signal indicates that the video density signal of the pixel shows a highlight level and there is a second edge adjacent to the pixel in a second image around the pixel, the directional signal indicates a direction of the first and second edges from the pixel. The drive signal is pulse-modulated by the video density signal. When the addition signal indicates an addition mode, a small dot is added at one of side portions of the pixel according to the directional signal. When the deletion signal indicates a deletion mode, one of side portions of dot which would be formed according to said video density signal is deleted according to the directional signal.

Mitsuse as such provides teachings directed to solving the problem of "a user unpleasant feeling because there is an edge serration between the second and third lines." (see col. 2 line 14-15 of Mitsuse). In the parlance of those skilled in the art, this is referred to as the problem of image anti-aliasing, also often referred to as "jaggies". This is much the same problem to which HP's RET technology is directed. We were concerned from the outset that there would be confusion with this technology problem and the present invention, which is why we include a discussion of it as prior art on page 7 line 33, through page 8 line 14 in the background of the specification. Thus, Mitsuse ignores and entirely fails to address the problem to which the Applicants' teaching is directed, namely lead edge deletion where the leading edges of image shapes are starved of toner, see page 1, lines 16-26, page 2 lines 9-23 and page 7, lines

Application No. 09/362,022

16-19 of the Applicants' specification, sometimes even to the point of no development *particularly as system throughput speeds are increased*. The Applicants' teaching is particularly focused on getting out in front of the leading edge, outside the halftone cell to start encouraging the toner cloud closer so as to insure proper toner accumulation. Thus, the claims as now amended more specifically call out that teaching for auxiliary pixel placement "placed around and exterior" (the specification support for which may be found on page 13, lines 10 & 11 of the Application). The claims as now amended are believed to over come the reference to Mitsuse and the rejection under 35 U.S.C. §102(e) as well as 35 U.S.C. §103(a) as being unpatentable. Allowance of claims 1-12 is respectfully requested.

It is respectfully submitted that the present set of claims are patentably distinct over the cited references. In the event the Examiner considers personal contact advantageous to the disposition of this case, he is hereby requested to call the undersigned attorney at (585) 423-6918, Rochester, NY.

Respectfully submitted,



Christopher D. Wait
Attorney for Applicant(s)
Registration No. 43,230
Telephone (585) 423-6918

October 12, 2005
CDW/fsl
Xerox Corporation
Xerox Square 20A
Rochester, New York 14644